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IS 11054 (1984): Nylon Blue Airmail Bags [TXD 20: Made-up Textiles]



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“Knowledge is such a treasure which cannot be stolen”



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*Indian Standard*  
SPECIFICATION FOR  
NYLON BLUE AIRMAIL BAGS

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**INDIAN STANDARDS INSTITUTION**  
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NEW DELHI 110002

# Indian Standard

## SPECIFICATION FOR NYLON BLUE AIRMAIL BAGS

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( Continued on page 2 )

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# *Indian Standard*

## SPECIFICATION FOR NYLON BLUE AIRMAIL BAGS

### 0. FOREWORD

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 15 March 1984, after the draft finalized by the Made-up Textile Items Sectional Committee had been approved by the Textile Division Council.

**0.2** This standard is based on particulars obtained from Directorate General of Posts and Telegraphs, Government of India.

**0.3** For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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### 1. SCOPE

**1.1** This standard prescribes constructional details and other requirements of air mail postal bags, made from nylon fabrics.

### 2. MANUFACTURE

**2.1** The bags shall be manufactured from nylon fabrics.

**2.1.1 Cloth** — The cloth shall be woven uniformly and evenly in plain weave from continuous filament medium tenacity nylon yarn of Type 6. The selvages shall have the same tension as the remainder of the fabric and shall not be unduly thicker than the fabric. The constructional particulars of cloth shall conform to those given in Table 1.

**2.1.2 Colour** — The cloth shall be oxford blue and nearest match to shade No. 105 of IS : 5-1978†.

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\*Rules for rounding off numerical values ( *revised* ).

†Specification for colours for ready mixed paints and enamels ( *third revision* ).



**2.2** The bag shall be made from single piece of cloth, except NS I and NS II types. The length of the bag shall be in warp direction in all types.

**2.2.1** Bags of NS I and NS II types shall be made out of 2 pieces — one for the sides and the other forming the bottom. The bottom portion should be of a square shape measuring  $35 \times 35$  cm; the around measurement being 140 cm ( *see* Fig. 2 ).

**2.3 Seam** — The sides of the bag shall be machine stitched using two rows of stitches. The first turning-in of the cloth should be about 5 mm and the second turning-in of the cloth should be about 10 mm. The stitches shall be of even tension throughout with all the loose ends securely fastened. The number of stitches per decimetre shall be 28, *Min.* The seam should be on the inner side of the bag to prevent fraying.

**2.4 Tabs** — Tabs for fixing cast aluminium loops to the bags shall be taper shaped and of the same basic material as of the bags. Each tab shall be 63 mm wide at the bottom and 25 mm at top. The tabs shall be secured with double layer of cloth and neatly stitched on to the bags at the mouth ( *see* Fig. 1 or Fig. 2 ).

**2.5 Thread** — The nylon sewing thread used for stitching ( *see* 2.3 and 2.4 ) shall conform to variety No. L<sub>3</sub> or L<sub>4</sub> of IS : 4229-1978\*. The colour and dye fastness of the sewing thread should be same as that of the basic material.

**2.6 Loops** — The cast aluminium loop, shall not be finer than 4.5 mm in diameter. The approximate dimensions of the loops are shown in Fig. 1 and 2. Two or four loops, depending upon the size of the bag shall be provided on each bag ( *see* Table 2 ).

**2.7 Mouth Reinforcing** — The mouth of the bag shall be reinforced by providing a cotton line of 7 mm diameter securely stitched to it. The line shall be spliced to a length of 5 cm and whipped properly before being stitched with the body of the bag.

**2.8 Marking on the Bag** — The marking on the bags shall be as required by the postal department ( *see* Table 2 ). It shall be done neatly using indelible ink ( *see* IS : 394-1963† ), on both sides of the bag. A typical positioning and size of the letters is shown in Fig. 1 or Fig. 2. Each bag shall also be marked, on the inner side, using indelible ink ( *see* IS : 394 - 1963† ) with the manufacturer's name or trade-mark, size, together with the year of manufacture.

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\*Specification for nylon sewing threads for aerospace purposes.

†Specification for ink, cloth marking ( *revised* ).



## 2.8.1 Each bag may be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution ( Certification Marks ) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

**2.9 Freedom from Defects** — The bags should be free from sewing and other fabrication and basic fabric defects.

## 3. REQUIREMENTS

**3.1** The basic cloth and colour fastness shall be as given in Table 1.

**TABLE 1 REQUIREMENT OF NYLON FABRIC FOR AIR MAIL BAGS**

( Clauses 2.1.1 and 3.1 )

SL No.	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST
(1)	(2)	(3)	(4)
i)	Constructional particulars:		
	a) Ends/dm	520	} $\pm 5$ percent IS : 1983-1981*
	b) Picks/dm	378	
ii)	Mass, g/m <sup>2</sup> , Max	80	IS : 1964-1970†
iii)	Breaking load ( 20 × 10 cm ) N ( kgf ), Min:		IS : 1969-1968‡
	a) Warp	1 020 ( 104 )	
	b) Weft	892 ( 91 )	
iv)	Colour fastness to:		
	a) Light	4 or better	IS : 686-1957§ IS : 2454-1967
	b) Washing: Test 2 ( Change in colour )	4 or better	IS : 3361-1979¶

\*Methods for determination of threads per unit length in woven fabrics ( *second revision* ).

†Methods for determination of weight per square metre and weight per linear metre of fabric ( *first revision* ).

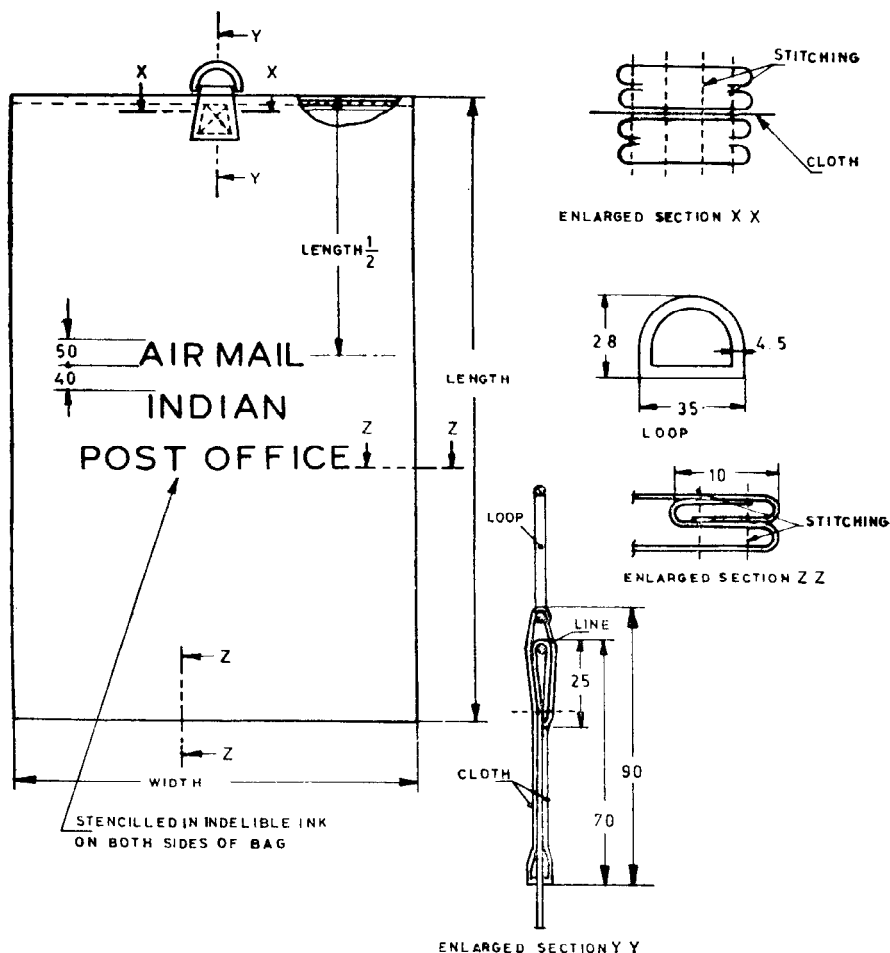
‡Method for determination of breaking load and elongation at break of woven textile materials ( *first revision* ).

§Method for determination of colour fastness of textile materials to daylight.

||Methods for determination of colour fastness of textile materials to artificial light ( xenon lamp ).

¶Method for determination of colour fastness of textile materials to washing: test 2 ( *first revision* ).

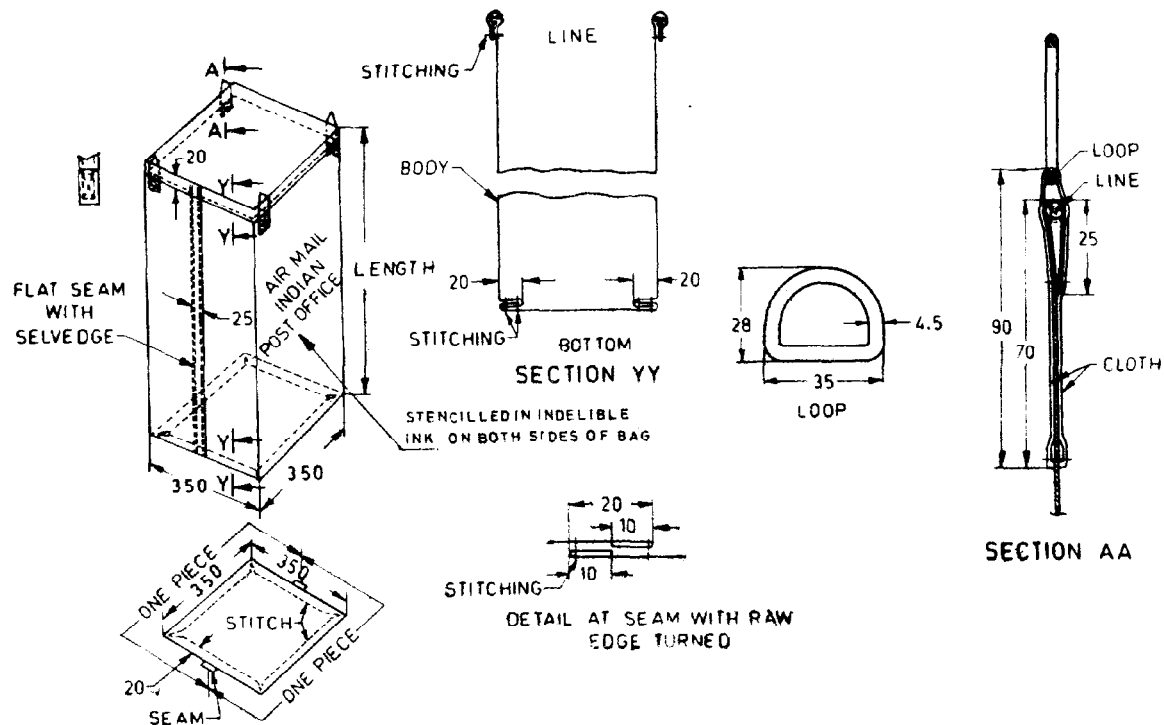
3.2 The general make-up of the bag shall be as shown in Fig. 1 and Fig. 2.



All dimensions in millimetres.

FIG. 1 AIR MAIL BAG OF N TYPE

7



All dimensions in millimetres.  
FIG. 2 AIRMAIL BAG OF NS TYPE

**3.3** The size, designation and other related details of the bags shall generally be as given in Table 2. A tolerance of  $\pm 1$  cm is allowed on size of bag.

**TABLE 2 PARTICULARS OF NYLON BLUE AIR MAIL BAGS**

( Clauses 2.6, 2.8 and 3.3 )

SL No.	TYPE OF BAG	SIZE OF BAG	HEIGHT $\times$ THICKNESS OF LETTERS FOR MARKING ON BAG	COLOUR OF MARKING INK	NO. OF LOOPS PER BAG
(1)	(2)	(3)	(4)	(5)	(6)
		cm cm cm	cm cm		
i)	Air mail, NS I	105 $\times$ 35 $\times$ 35	5 $\times$ 1	Yellow	4
ii)	Air mail, NS II	75 $\times$ 35 $\times$ 35	5 $\times$ 1	Yellow	4
iii)	Air mail, N I	120 $\times$ 75	5 $\times$ 1	Yellow	4
iv)	Air mail, N II	100 $\times$ 65	5 $\times$ 1	Yellow	4
v)	Air mail, N III	75 $\times$ 50	2.5 $\times$ 0.6	Yellow	2
vi)	Air mail, N IV	50 $\times$ 35	2.5 $\times$ 0.6	Yellow	2

**3.4** If in order to illustrate or specify the indeterminable characteristics, such as workmanship, general appearance, lustre, feel and shade of the bag, a sample has been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.

**3.4.1** The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

## 4. PACKING

**4.1** The bags shall be packed as agreed to between the buyer and the seller.

## 5. SAMPLING

**5.1 Lot** — The quantity of postal bags of same designation delivered to a buyer against a despatch note shall constitute a lot.

**5.2** The conformity of the lot shall be determined on the basis of the tests carried out on the sample selected from it.

**5.3** Unless otherwise agreed to between the buyer and the seller, the number of bags to be selected at random from a lot shall be according to col 1 and 2 of Table 3.

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**TABLE 3 SAMPLE SIZE AND PERMISSIBLE NUMBER OF  
NON-CONFORMING BAGS**

LOT SIZE	SAMPLE SIZE	PERMISSIBLE NO. OF NON-CONFORMING BAGS
(1)	(2)	(3)
Up to 100	13	1
101 to 150	20	2
151 to 300	32	3
301 to 500	50	5
501 to 1 000	80	7
1 001 to 3 000	125	10
3 001 and above	200	14

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**5.4** The number of bags selected according to **5.3** shall be examined for seam, reinforcement of the mouth, marking, freedom from defects, and the dimensions.

**5.4.1** The number of bags to be examined for colour fastness shall be three for lot size less than 1 000 and five otherwise.

**5.5 Criteria for Conformity** — The lot shall be declared as conforming to the requirements of this specification if the following conditions are satisfied:

- a) The number of bags found not in conformity with the requirements for anyone or more the characteristics mentioned in **5.4** is less than or equal to the corresponding number given in col 3 of Table 3.
- b) All the test specimens tested for colour fastness are found satisfactory.

# **INDIAN STANDARDS**

## **ON**

### **MADE-UP TEXTILE ITEMS**

#### **IS :**

7609-1975 General requirements for tents

8857-1978 Canvas water bucket

8927 ( Part I )-1978 Haversacks: Part I For Railway personnel

8929-1978 Chagul

9886-1981 Mosquito nets

10321 ( Part I to III )-1980 50-kg tent

Part I General

Part II Outer fly

Part III Inner fly